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ABSTRACT

The role of the Canadian National Institute for the Blind (CNIB) in serving the aboriginal (indigenous) peoples of Canada, especially those in the Northwest Territories (NWT), is described, and the possibilities for future library delivery systems are discussed. The right of these peoples, and of all blind and visually impaired persons, to self-determination is a guiding principle in the CNIB service-delivery system. CNIB, which has provided vision services that are called eye patrols in the NWT since the 1930s, established the CNIB Library for the Blind in 1918. This privately funded library is the largest national production and distribution network for information to blind and visually impaired Canadians. Works are distributed in English and French because a comprehensive braille code has not been developed for the aboriginal languages. Funding and access problems mean that blind and visually impaired people in the NWT are not well served. Recognizing the potential of the electronic highway for improving services, CNIB has responded by establishing an Information Resource Center to serve as a library without walls that uses computer terminals and telephones to increase access to information for those who are unable to read print. Two maps illustrate the service areas. An eye test chart is included. (SLD)

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# DOG SLEDS TO SATELLITES

# LIBRARY SERVICE IN THE LAND OF THE MIDNIGHT SUN

U.S. DEPARTMENT OF EDUCATION
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An address to the Seventeenth Biennial National Conference of Librarians Serving Blind and Physically Handicapped Individuals

by Dr. Euclid J. Herie
President and Chief Executive Officer
The Canadian National Institute for the Blind

Denver, Colorado
May 1994

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

## INTRODUCTION

I want to talk to you today about how The Canadian National Institute for the Blind serves aboriginal people in Canada, particularly those in remote, isolated or underserved areas of the country.

My aim is to give you a vivid picture of the Canadian north, and its people, before telling you about what CNIB does in both urban areas and in the north. After discussing the respective responsibilities of public libraries and the CNIB, I will briefly describe the possibilities for future library delivery systems in the north. I will show you a few descriptive photos as a backdrop while I speak. Intended as a backdrop, the historic photos may not correspond exactly or directly to the spoken text.

When we talk about the remote or isolated areas of Canada, we are referring to Canada's north, an area of the country which is largely populated by Canada's aboriginal peoples. I use the term aboriginal people on the advice of the Native Council of Canada. "Aboriginal" is considered to be the most inclusive term, encompassing all indigenous people including the people we formerly would have referred to as either Indian or Eskimo. The term First Nations, which we also hear, covers all of Canada's native population, but does not typically include the Inuit population. Just as we now tend to replace the word "crippled" with the more contemporary "person with disability", so too have we updated the language we use regarding Canada's aboriginal population.

I believe reclaiming their rights is the highest priority of Canada's Aboriginal people. Using self-proclaimed or self-determined names is just one part of this. It may surprise you to learn that, within living memory, our government identified the Inuit not by name, but by a numerical tag! Archival records of government sponsored CNIB northern eye patrols, which I will discuss later, mention the confusion created by trying to keep people and tags straight. The terms "Indian" and "Eskimo" are not generally thought of as aboriginal names, and thus have largely fallen out of use. Native land claims are another important aspect of reclaiming a rightful heritage. To fully respect this right to self-determination, therefore, I must make it clear that I do not speak on behalf of the aboriginal population. My address to you is strictly limited to my experience as the leader of The Canadian National Institute for the Blind, a charitable private organization dedicated to services to blind, deaf-blind and visually impaired Canadians.

I should also say that this right to self-determination is a guiding principle in our service delivery system, not only with aboriginal populations, but with all blind and visually impaired persons with whom we are associated. We respect and promote their right to personal choice and self-empowerment.

**GEOGRAPHY**

To understand the limitations and difficulties we must cope with in delivering alternate format library services to the north, I'd like to talk for a moment about the geography of Canada, and of the Northwest Territories (NWT), Yukon, and Labrador, which make up the largest part of the north. It is very important to recognize that Canada's geography and the patterns of settlement in the population have impacted on the manner in which we deliver services.

Canada has a land mass of nearly 10 million square kilometres. Some would claim that we are the largest country in the world, but we rank only 31st in population. The text books say that only 11% of our total land mass has been permanently settled! Our most densely populated provinces are Ontario and Quebec, with the greatest bulk of the Canadian population centred around the Great Lakes and St. Lawrence regions, and the Toronto-Ottawa-Montreal corridor. Let me offer you a solid comparison about geography and population: With 25 million people, Canada has a population density of 7 persons per square mile. This compares to a density of 70 persons per square mile in the United States. Despite our dense urban populations, we have vast remote spaces in the north where service delivery is a challenge. Canada's remote or northern areas are found in the Northwest Territories, Yukon and Labrador, as I said earlier. Canada is made up of ten provinces, and the two territories called Yukon and the Northwest Territories. The region of Labrador is part of our tenth and newest (1949) province, Newfoundland. In 1986, the CNIB opened a regional office in Yellowknife, NWT which serves all of the NWT.

If timing and technology serve me well, the backdrop slide you are seeing now is a map of Canada. The Northwest Territories are shown in yellow, the rest of Canada is shown in dark grey. *(Map 1 Appendix)* In the second slide, I've added red shading to all geographic areas north of 60 degrees latitude, to give you a true picture of the land mass which we consider northern, remote or isolated. *(Map 2)* As you can clearly see, this is an incredibly vast land, bordering on three oceans. For the purposes of this speech, I will primarily focus on services in the NWT.

The Northwest Territories constitutes one-third of Canada's land mass and takes in three time zones. Although there are

55 small communities in the NWT, only 10 of them have roads which can be used year-round. Some communities are accessed in the winter by snow roads across frozen tundra, lakes and rivers. Baffin Island, which has a population of roughly 12,000 people, has only 20 kilometres of government maintained highway.

In the Northwest Territories, the land of the midnight sun, along the northern reaches of the great Mackenzie River, the sun will rise on the 24th of May each year, not to set again until July 16th. In the winter, however, the sun sets on December 7th, and does not rise again until January 6th.

Aboriginal people make up 60 percent of the population of the NWT. Because Yellowknife has a high non-aboriginal population, this figure would be significantly higher outside the Yellowknife urban area. For instance, in the Eastern Arctic, 80% of the population is Inuit.

The consensual style of the territorial government, where members sit in an inclusive circle with the Speaker, functions in 9 official languages. These are the aboriginal languages of Inuktitut, North Slavey, South Slavey, Dogrib, Gwichin, Chipewyan, and Cree. Of course, in addition to seven aboriginal languages, we must add the two official languages of Canada — French and English. You might also be interested


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to know that the Inuktitut language has three distinct dialects.

For fun and information, I have included the Snellen syllabic eye chart which the CNIB developed for use in northern eye patrols (which, as I promised I will talk about later). Originally developed by Anglican missionaries in the late 1800's as a quick way to teach Canada's Inuit to read the Bible, syllabics, and not Roman orthography remain today the most popular way to transcribe Inuktitut.

The residents of the Northwest Territories must also cope with rather severe financial realities. The average household income is roughly 60 percent **less** than the national average, yet the cost of living is anywhere from 20 to 50 percent **higher** than in major urban centres elsewhere in Canada.

It has also been documented that alcoholism, substance abuse and suicide occur at a tragically higher rate in the north. Through national media coverage many of us are painfully aware of the situation in Davis Inlet, Labrador. I believe Americans would have learned of the Davis Inlet story through CNN coverage in particular. The conditions in that community have fostered severe alcohol and chemical dependency, particularly among the youth, and have served as a shocking wake-up call to Canadians and to government. The conditions in Davis Inlet are not the norm, but neither are they unheard of or unusual in other northern communities.

In order to give you the most balanced picture of the north, I must tell you something of the positive side of the equation. To a people who were indigenously nomadic, culture and tradition have served as important roots. Nearly every community or region has both a summer and winter festival, and the Arctic Winter games draw athletes from across the north.

As well, the federal government is committed to working with aboriginal leaders to begin the transition to native self-government. Many dedicated hard-working individuals have put in long years to see the right to self-government realized. A large portion of the Inuit populated Eastern Arctic has been designated as Nunavut (which means *Our Land* in the Inuit language), and will be governed by aboriginal peoples. Despite some considerable obstacles, there is great hope for prosperity and harmony in Canada's north.

## CNIB's INTRODUCTION TO THE NORTH

Edwin Baker, and numerous others whose names remain in memory only, were the driving force behind the early programs in the far north. Indeed, they owe their existence to them.
In 1931 Baker presented a proposal to the federal department of Indian and Northern Affairs Canada, suggesting that a study be conducted into the incidence of trachoma among aboriginal populations.

As a result of Baker's proposal — as well as his ongoing support, coordination and expertise — northern eye patrols were established. By 1935, the Eastern Arctic eye patrols as the mobile field clinics were called, were fully underway.



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Then, and now, it is necessary to set priorities for service delivery. For reasons which I am sure are readily obvious, eye care services necessarily take priority over library services.

On each trip into the North in the 1930's and 40's, CNIB workers were doubtless called upon to make use of the full range of their skills, as well as to tap the full depth of their courage, resourcefulness and humour.

Here is a sample diary entry, written by Miss Margaret Moeller, a CNIB vision rehabilitation nurse, during her 1945 journey on the northern eye patrols. She wrote:

"At every port the ship had to anchor a considerable distance from shore, and two barges and a motor boat were used to convey freight and passengers ashore. I learned never to walk without rubber boots and a rain coat, for the spray and waves can soon drench one...(M)ore often than not, one has to climb over the side of the barge and walk in the water to shore.

"Around Fort Ross, the ice floes impeded our progress again and the Nascopie *(the Hudson Bay Company ship on which the team travelled)* had to break through fields of thick ice... For two days, we were stopped with ice all round us



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and unable to move, but the wind changed and the ice began to move south and everyone breathed freely, for it is here that the danger of being hemmed in for the winter is greatest."

Based on that account, you can appreciate why not just anyone would want to be first to participate in such a project!

During that summer of 1945, the CNIB team and their colleagues and crew on the Nascopie travelled to 11 remote ports of call scattered over 10,000 miles of rocky, icebound territory north of 60 degrees latitude.

Their field reports, which have been carefully preserved by the National Archives of Canada, detail a very vivid picture of the social and economic conditions in the north, as well as the physical and medical status of the most northerly inhabitants, the Inuit.

Certainly travel conditions have vastly improved since that time. As I mentioned to you earlier, however, travel in the north is still made exceedingly difficult because of the lack of highways and because of the vast distances which must be travelled.


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Miss Lydia Bardak is the Regional Director for CNIB, based in Yellowknife. For the people of Yellowknife, and the rest of the NWT, Lydia Bardak **is** the CNIB. Since 1990, she and a small secretarial support team have been singly responsible for representing the CNIB to a vast expanse of the NWT. From her office in Yellowknife, she visits over 60 communities ...only 10 of which are accessible by road. "It seems like I'm flying all the time", she says.

While Lydia's central role is providing rehabilitation services, we could also humorously say she serves as a reference desk for the library!

## THE CNIB LIBRARY FOR THE BLIND

The CNIB Library for the Blind provides talking books and braille to northern clients and to other libraries. The CNIB Library's commitment to educating blind Canadians actually predates the CNIB. The Canadian Free Library for the Blind was established in 1906, the CNIB in 1918. The Free Library merged with the CNIB in 1918. The CNIB provides a national, mail order library, with a circulation of nearly one million to 16,000 readers annually, and receives virtually no government funding to do so. The CNIB Library for the Blind is the single largest national production and distribution network for information to blind and visually impaired Canadians.

The Library owns over 50,000 titles in French and English audio, braille volumes and braille music scores. In 1993, 1,300 new titles were added, over 100,000 original pages of braille were transcribed, and nearly one million braille pages were copied. It is important to note that the CNIB continues to rely heavily on volunteer braille transcribers and narrators to make new additions to the CNIB collection possible. The

Library makes copies of its collection available for sale to other service providers — such as public libraries — and produces copies of text books and other materials for education and business.

In fulfilment of its mandate, the CNIB Library has given special recognition to the reading interests of aboriginal people and has amassed a significant collection of works.

The Library is, however, limited to collecting those works published in English or French, simply because a comprehensive braille code for aboriginal languages has not yet been fully developed. The Canadian Braille Literacy Foundation of the CNIB is particularly interested in nurturing the development of braille codes for aboriginal languages, and has specifically invited aboriginal groups to submit proposals. Three innovative proposals have been received for consideration in this funding cycle.

Although it is generally acknowledged that there are a number of aboriginal languages and dialects which must be included in Canada's written heritage, the task has been made additionally complex by the fact that the aboriginal culture has been, in the past, largely oral. Many dedicated groups and

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individuals have begun the massive undertaking of recording this important oral history. As they develop aboriginal language braille codes, volunteer braillists and aboriginal leaders will no doubt consider the oral historians an expert resource. And, of course, the intermediate step in putting together a printed record of oral histories — ie, putting stories on tapes — virtually creates a talking book.

## ESTABLISHING NETWORKS

A growing number of other agencies and libraries also support the broad education, leisure and employment information needs of blind and visually impaired Canadians. The production of text books for students is primarily the responsibility of provincial or territorial governments across Canada, and is frequently provided through what are called provincial educational resource centres.

There are 1,486 public and regional library systems in Canada. These libraries are a municipal or provincial responsibility, mandated through provincial legislation to service their entire community regardless of disability or ethnic origin.

The CNIB Library is a private, charitable division of The Canadian National Institute for the Blind. The production of alternate format resources for blind and visually impaired Canadians has not yet been given recognition as a public responsibility, despite the protection from discrimination afforded by the Charter of Rights and Freedoms. Under the federal Charter of Rights and Freedoms, every Canadian is protected from discrimination on the basis of disability. It could thus be clearly argued that the right of every disabled Canadian to freedom from discrimination can be interpreted to mean that the universal right to information in a format accessible to him or her is protected. Indeed, to continue to

deny access to the printed word to blind, deaf-blind, and visually impaired persons is, in my view, censorship in its worst form.

Despite the Charter, library service delivery to blind Canadians is inequitable, and varies with the fortunes of each community. Alternate format public library collections are not comprehensive, nor are home delivery and braille transcription services (which would facilitate access to the print collections) commonly available.

The new National Library of Canada adaptive technologies program will fund the purchase of equipment which makes collections more accessible to blind Canadians. To date, approximately 24 library systems have applied for funding. The major difference between the Canadian and American systems is the way in which alternate format material is produced and funded.

In the United States, the Library of Congress receives government funding to fulfil its national, legislated mandate for the production of alternate format literature. This was made possible when the United States Congress passed the Pratt-Smoot Act on March 3, 1931.

In Canada, the parliamentary statute establishing the Library of Canada, may be said to be somewhat vague in reference to the Federal mandate to serve the print handicapped and provides only minimal funding through the budgetary process.

This explains why the production of alternate formate materials is mainly the responsibility of the privately funded CNIB Library for the Blind or other private entrepreneurs. In addition to producing its own masters, the CNIB Library obtains masters from the Library of Congress National Library

Service for the Blind and Physically Handicapped (NLS) together with other producers. In turn CNIB Library distributes, on a cost-recovery basis, copies of books on tape to libraries and other service providers across Canada. These collections are made available, free of charge, to print handicapped Canadians.

Unlike the United States, Canada does not have a powerful, cohesive, nationally coordinated consumer voice of blind persons who would insist upon the development of a national policy on literacy and access to information for print handicapped Canadians. On a provincial level, however, there are active consumer groups, notably in Quebec. They provide an illustration of what could be achieved on a national scale to ensure both quality and availability of braille and audio materials.

What this means for the blind or visually impaired Canadian then, is that comprehensive special library service is not necessarily widely available in their community. Because library service tends to vary according to the fortunes of the community, and because northern communities tend not to be among the well-off, blind and visually impaired northerners are poorly served. I would like to turn now to discussion about how we might change this in the future with remote library service.

## ELECTRONIC ACCESS

I believe the so-called electronic highway may provide some viable solutions to information access difficulties experienced by blind and visually impaired northerners.

The term electronic highway was coined by persons unknown to mean the electronic route which would be opened up by the marriage of telephones, computers and televisions, and all their attendant capacities, capabilities, and complexities. Right now, for instance, the automatic debit system — using your bank card to automatically debit payment at point of purchase — is made possible by the marriage between telephone and computer technology.

The possibilities of future technological marriages are mind boggling and unlimited. Just this month, the national consortium of Canadian telephone companies, Stentor, announced plans to develop fibre optic technology which will deliver broadcasting programming to the television through the telephone.

In the past this was simply not possible in the north. Prior to the arrival of satellite technology, transmission of information was at the whim of the elements, the northern lights, and other polar and magnetic interruptions. And of course it is physically impossible to lay cable across the entire country. This won't be as important in the future, however, as satellite technology opens new possibilities for cable sub-systems. The CNIB Library for the Blind is no stranger to the technological possibilities of electronic marriages, and is repositioning itself to harness technology to the maximum benefit of its present and future customers.

The newly conceived CNIB Information Resource Centre (which will be officially opened later this year) is a modern concept in service for blind and visually impaired users. Because it can be accessed on-line at any remote location, we call it "a library without walls". The reader seeking educational, employment or recreational information will be able to access the resources of the centre, downloading

information in alternate format. The Centre was developed to demonstrate the leading edge technologies in information services and adaptive technologies for users. Links with public libraries, universities and provincial educational resource centres will be of reciprocal benefit. Citations and other requested information will be converted at the Centre into alternate format and delivered either through the Internet or by mail on disk, audio, or braille printouts as directed by the user.

In fact, the use of the Internet for linking or providing access to the information highway is being heavily investigated. The CNIB Library already uses the Internet to download files and expects to use it to make links to a variety of freenets, provide access to its catalogues, and to provide customer access to other catalogues. The process of identifying appropriate uses of the Internet in the CNIB Library system is well underway in Toronto.

The immediately obvious drawback on the electronic highway, of course, is the availability of computer terminals in remote areas. Affordability is perhaps the most significant factor. Comprehensive computer set-ups in the home are generally beyond the financial reach of most people, northern or not.

One means to address the question of affordability would be to have governments assume responsibility for equipping municipal libraries and provincial educational resource centres. Individual northerners could then write to or visit their regional centre — be that a library, government office, or territorial educational resource centre — and request materials.

Another, more immediate and less expensive solution is offered by the telephone. Like many other service providers,

libraries are setting up voice access systems. A planned feature of the CNIB "library without walls" is telephone access to on-line catalogues and other library services. Materials requested through any on-line or telephone access system would be mailed to the end user. Certainly a northern or remote location poses no insurmountable obstacle to Canada Post, who use bush planes, snow roads, trucks and, I've heard rumoured, even dog sleds to deliver mail. Although mail certainly wouldn't be delivered daily in all northern locations, as Canada Post itself says, "As long as you have an address, we'll get it to you!" Canada Post prides itself on being the sole Canadian service provider with access to every single Canadian household and business — telephone and hydro can't make the same claim in Canada.

We must be mindful, however, that the electronic highway will only become a reality to the print handicapped in remote, northern communities when first we have unscrambled the various linguistic and dialectic complexities unique to a sizeable portion of the Canadian population.

## CONCLUSION

I have attempted here to bridge an enormous, bewildering and ever widening technological information gap. As the sled dog was (and is) the transportation link among the Inuit, so too may the satellite be symbolic to the information links and needs of all of us — and especially to those among us who can not visually read print.

In my attempt to describe the developments of the information age, I make no claim to a full understanding of the events and developments in the information explosion in technology, a field which is changing even as we speak. In another forum I have expressed my personal fear that these exciting and

incredible developments in communications and access to information may create an even greater disadvantage to the print handicapped, unless and until we become involved at the source.

In recent years, The Canadian National Institute for the Blind has cooperated with the National Library of Canada to develop a national strategy which will resolve the jurisdictional, funding and distribution issues which plague us. Until that goal is achieved, Canada will have, at best, a patchwork approach to serving the print handicapped. This is even more true for those aboriginal Canadians whose language is other than French or English. We have an enormous, urgent task at hand, one on which we must focus all of our skills — determination, hard work, patience and diplomacy. Those of us unable to read print, including aboriginal Canadians, must not be kept waiting any longer in an information abyss.

Thank you.

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Notes

CNIB The Canadian National Institute for the Blind

INCA L'Institut national canadien pour les aveugles

*Research by:*
*Wanda S. Hamilton*

# EYE TEST CHART

Snellen Scale

## SYLLABICS

PUBLISHED BY
THE CANADIAN NATIONAL INSTITUTE FOR THE BLIND
National Office, Pearson Hall, 186 Beverley Street, Toronto, Ontario
(416) 486-2500 M4G 3E8

# INSTRUCTIONS FOR USE

1. Do not permit this chart to be exposed when not in use. Children easily memorize, and will learn the letters, in "Sequence" making impossible a true test of their vision. If examiner suspects that chart has been memorized, individual letters should be named as pointed out by examiner.

2. Do not allow chart to be covered with glass, when in use, as light may be reflected or letters distorted thereby. Fasten both top and bottom.

3. Place the vision test chart flat against the wall in a good light, at a height to bring the smallest letters (line 20/20 or 6/6) about on a line with the eyes of the person being tested. Chair for use of person should be 20 FT. or 6 M. from chart, and facing it squarely. If distance of 20 ft. or 6 m. cannot be secured indoors, test person outside. Shorter distance does not give correct results, particularly in cases of short sight.

4. Examine persons individually; test right eye first with left eye covered by a piece of cardboard without pressure. Record degree of vision; next, test and record left eye in the same manner.—Record vision of each eye separately even though it may be the same in both eyes.

5. Have the individual under test, begin at the top of the chart, and read aloud until letters can no longer be distinguished.

6. To illustrate: If an individual can, with the right eye alone, read without error all the letters in line 20/20 or 6/6, the right eye may be said to have normal vision. If the left eye is tested, and found to see not better than the letters in the 20/40 or 6/12 line, the left eye is recorded as having 20/40 or 6/12 vision, *i.e.*—it only sees at 20 ft. or 6 m. what should be seen at 40 ft. or 12 m.

7. For the use of children and illiterates who do not know the names of letters, the symbol E chart is used. In using symbol E Chart the examiner should refer to the test symbol E as a funny little animal with legs which may turn over and over, sometimes pointing up, sometimes down, sometimes to the right, sometimes to the left. The child by a wave of the hand shows that he recognizes the direction in which the legs point.

Common errors made by examiners are: Allowing the pointer to cast a confusing shadow on the chart; obscuring the letter with pointer; not clearly indicating the line to be recognized; and not detecting that the pupil has memorized the characters.

8. Failure to read the line is indicated by more than two mistakes. Vision of 20/30 or 6/9 is not necessarily reportable as defective vision, but may usually be taken as a symptom of some other physical ailment, such as tonsils, adenoids, or poor bodily condition, which when treated should relieve the eye condition. Where there is no public health nurse available, the parents or guardians of any child who has 20/40 or 6/12 or less vision recorded for either eye, should be notified that the test made at the school indicated defective vision, and that a reliable eye physician should be consulted.

9. Records should be kept of all tests of visual acuity, in order that subsequent examination may show if a change in degree of vision has occurred.

10. Remember that normal vision as indicated by this chart does not always mean that the eye is entirely free from latent defect or eyestrain which may cause serious results later, unless relieved. Signs of eyestrain may be: holding a book nearer than 14 inches, scowling or screwing up the face, one eye out of focus, inflamed eyes or lids, recurring headaches, backwardness, nervousness, etc. A teacher has the best opportunity to detect these signs, as she is constantly with the pupil when he is using his eyes.

11. It is desirable, as far as possible, that the metric system should be used to designate the degree of vision. To facilitate its use on this card, small fractions in the denominator, which have no practical importance, have been dropped.

REMEMBER, THE SHORT-SIGHTED CHILD OF TO-DAY MAY BE THE BLIND CHILD OF TO-MORROW!

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